

**OX CART**

**FACTS**

## A-12 SPECIFICATIONS

### AIRFRAME

WING SPAN	55.62'
LENGTH	101.6'
HEIGHT	18.45'
LANDING GEAR	
TREAD WIDTH	16.67'
BASIC WEIGHT	52,700 LBS.
MAX GROSS WEIGHT	123,600 LBS.

### ENGINE

PRATT & WHITNEY	J-58 (JT11 D20)
THRUST	32,500 LBS.
AIRSPEED	3.2 MACH
ALTITUDE	100,000'
BY - PASS	WITH AFTER BURNER

### PERFORMANCE

DESIGN SPEED	3.2 MACH (1860K)
ALTITUDE	84,000 ft
RANGE (NO-REFUEL)	3,700 N. M.

A-12  
EXPERIENCE RECORD  
(AS OF 10 JULY, 1967)

AIRCRAFT

FIRST FLIGHT	26 APRIL 1962
TOTAL FLIGHTS	2470
TOTAL HOURS	4013:43
TOTAL FLIGHTS @ MACH 3.0	757
TOTAL HOURS @ MACH 3.0	455:49
LONGEST FLIGHT @ MACH 3.0	3:50 HRS.
LONGEST MACH. 3.2 TIME ON A SINGLE FLIGHT	3:30 HRS.
LONGEST SINGLE FLIGHT DURATION	7:40 HRS.
SPEED - MAX	3.29 MACH
ALTITUDE -MAX	90,000 FT.

J-58 ENGINES

TOTAL ENGINE FLIGHTS	7,442
TOTAL ENGINE HOURS	14,109
TOTAL ENGINE FLIGHTS @ MACH 3.0	3,184
TOTAL ENGINE FLIGHT HOURS @ MACH 3.0	1,774
TOTAL GROUND TEST HOURS	25,263
TOTAL MACH 3.0 ENVIRONMENTAL GROUND TEST HOURS	6,139
TOTAL 150 HOUR QUALIFICATION TESTS	6

## TNS

TOTAL FLIGHTS	1,430
TOTAL FLIGHT OPERATING HOURS	3,227
TOTAL OPERATING TIME	39,733

## SAS AUTO PILOT

TOTAL FLIGHTS	2,469
TOTAL FLIGHT HOURS	4,003
TOTAL OPERATING HOURS	37,994

## CAMERAS

	I	II	III
TOTAL FLIGHTS	203	78	49
TOTAL FLIGHT OPERATING HRS.	156	65	26
TOTAL FLIGHT ABOVE MACH 3.0	100	49	29
TOTAL HOURS @ @ MACH 3.0	84	47	19
LONGEST FLIGHT @ MACH 3.0	1.5	2.0	1.3

## PILOTS (6)

AVERAGE PILOT EXPERIENCE	14.4 YEARS
AVERAGE TOTAL FLIGHT TIME	3998 HOURS
TIME IN A-12	87/353/452 HRS.
TIME IN PROJECT	.7/4.6 YEARS
AVERAGE A-12 FLIGHTS	223

LIFE SUPPORT

TOTAL SUIT FLIGHTS (DETACHMENT) 1751

EWS

TOTAL FLIGHT TESTS 110

DETACHMENT

ACTIVATED 1 OCTOBER 1960  
TIME IN TRAINING AS A UNIT 1/ 54 MONTHS  
AVERAGE TIME IN PROJECT  
(PERSONNEL) 40/44 MONTHS

OX CART A-12 AIRCRAFT:

INVENTORY

OPERATIONAL AIRCRAFT:

KADENA AB 3

EO 12958 3.3(b)(1)>25Yrs  
(N)

3

TWO - SEAT TRAINER 1  
FLIGHT TEST AIR-  
CRAFT 2/ 2

A-12 ACCIDENT HISTORY

<u>ACFT NBR</u>	<u>DATE</u>	<u>PILOT FATE</u>	<u>CAUSE</u>
123	5-24-64	Ejected Safely	Plugged Pilot Static Tube Mal- function
133	7-9-64	Ejected Safely	F'lt Cont. Sur- faces

<u>ACFT NBR</u>	<u>DATE</u>	<u>PILOT FATE</u>	<u>CAUSE</u>
126	12-28-65	Ejected Safely	<del>GROUND CREW-</del> Human Error
125	1-5-67	Fatal	Fuel Guage Malfunction

---

1/ DETACHMENT I, 1129th BEGAN TRAINING AS A UNIT  
COINCIDENT WITH DELIVERY OF FIRST AIRCRAFT (TRAINER)  
IN JANUARY 1963. PRIOR TO THAT IT HAD BEEN SUPPORTING  
LAC FLIGHT TEST EFFORT.

2/ ONE FLIGHT TEST AIRCRAFT (#122) "MOTHBALLED" AT  
PALMDALE. CALIF. - 16 SEPT 67

OXCART  
SENSORS

## SYSTEM VI

WIDE BAND CRYSTAL VIDEO ELINT RECEIVER  
AND RECORDER.

MANUFACTURER - THOMPSON - RAMO - WOOLDRIDGE  
(TRW SYSTEMS, INC.)

NUMBER OF SYSTEMS IN INVENTORY (3)

WEIGHT - APPROX. 70 LBS.

FREQUENCY COVERAGE - 5 BANDS

50 TO 600 MHz, 600 TO 1GHz

1 GHz TO 2 GHz to 4GHz

4 GHz TO 8 GHz AND TIME CODE GENERATOR

BANDWIDTH - 30 KHz

SENSITIVITY - (-45 dbm)

CAPABILITY - PROVIDES CONTINUOUS ANALOG  
RECORDING WITHIN THE ABOVE  
MENTIONED FREQUENCY BANDS.

## BLUEDOG

MISSILE GUIDANCE JAMMER - RECEIVES, STORES  
AND RETRANSMITS SA-2 "L" BAND MISSILE GUIDANCE  
COMMANDS WHICH PROVIDE FALSE COMMANDS TO THE  
MISSILE DURING THE TERMINAL PORTION OF THE INTER-  
CEPT.

MANUFACTURER - ELECTRONIC DEFENSE LABS (SYLVANIA)

NUMBER OF SYSTEMS IN INVENTORY (7)

WEIGHT - APPROX. 480 LBS. (INCLUDES CHINE BOX)



CAPABILITY - CAN PROVIDE FALSE COMMANDS  
TO (27) MISSILE SIMULTANEOUSLY

PEAK POWER OUTPUT - 20,000 WATTS

PIN PEG

THREAT WARNING SYSTEM - DETECTS PRESENCE  
OF FAN SONG RADAR TRACKING THE AIRCRAFT AND PROVIDES  
LIGHT INDICATION TO PILOT AND AUTOMATIC JAMMER  
TURN ON.

MANUFACTURER - WESTINGHOUSE

NUMBER OF SYSTEMS IN INVENTORY - (8)

WEIGHT - APPROX. 30 LBS.

FREQUENCY RANGE - 2.8 GHz to 3.2 GHz  
4.8 GHz to 5.2 GHz

DISCRIMINATION - SORTS PRF, SCAN RATE, PULSE  
WIDTH, FREQUENCY

SENSITIVITY - (-40 dbm)

BIG BLAST

BARRAGE NOISE JAMMER- PROVIDES WIDE BAND  
NOISE JAMMING TO DENY RANGE INFORMATION TO FAN  
SONG TRACKING RADAR. THIS SYSTEM IS TURNED ON  
AUTOMATICALLY BY EITHER PIN PEG OR BLUE DOG.

MANUFACTURER - APPLIED TECHNOLOGY, INC.

NUMBER OF SYSTEMS IN INVENTORY - (6)

WEIGHT - APPROX 400 LBS (INCLUDES CHINE BOX  
AND PIN PEG)

FREQUENCY RANGE - 2.8 GHz to 3.2 GHz  
4.8 GHz. to 5.2 GHz

TYPICAL BANDWIDTH (FLAT TO WITHIN 1 db)  
200 MHz EACH BAND

AVERAGE (AND PEAK) POWER OUTPUT - "S" BAND -  
200 WATTS

"C" BAND  
400 WATTS

TYPE - I - CAMERA

PANORAMIC STERO, (2) CAMERAS IMAGING ON  
A SINGLE FILM ON A STABILIZED PLATFORM.

MANUFACTURER - PERKIN-ELMER

NUMBER OF SYSTEMS IN INVENTORY - (5)

WEIGHT - 690 LBS. - INCLUDES FILM MOUNTING  
BRACKETS

FILM - 1 ROLL, 6.6" x 5000' - TYPE 3404 THIN BASE  
UNPERFORATED

PICTURE FORMAT - 27.67" x 6.35" - SCALE AT  
80,000' = 1/60,000

COVERAGE LINEAR - 2,500 N. M.

COVERAGE LATERAL - 4.8 x ALTITUDE (63 N. M. at  
80,000' ABSOLUTE)

LENS - 18" - f3.8 refractor

EXPOSURE - 1/50 TO 1/600 PREPROGRAMMED

RESOLUTION - 1 FOOT, HIGH CONTRAST, 200 LINES/MM

TYPE - IV - CAMERA

FRAMING CAMERA WITH A LATERAL INDEXING MIRROR HEAD, SINGLE 48" LENS IMAGING ON AN 18" x 18" FORMAT, SIMULTANEOUSLY ON 2 ROLLS OF FILM, 1/2 ON EACH ROLL.

MANUFACTURER - HYCON

NUMBER OF SYSTEMS IN INVENTORY - (3)

WEIGHT - 892 LBS. - INCLUDES FILM

FILM - 2 ROLLS, 9.5" x 6000', thin base type  
3,400 UNPERFORATED

PICTURE FORMAT - 18" x 18", SCALE AT 80,000' -  
1/20,000

COVERAGE LINEAR - 8 MODES, 50 MIN to 71 MIN,  
1,860 N.M.

COVERAGE LATERAL - 29.04 N.M.

LENS - 48" f 5.6 REFRACTOR

EXPOSURE - 1/60 TO 1/1000 COCKPIT CONTROLLED  
"FAST" OR "SLOW"

1/25	1/60
1/250	1/25
1/500	1/250
1/1000	1/500

14 NOV 72

OX CART AVIONICS:

1. The original EWS configuration of OXCART consisted of PIN PEG, passive warning system, BLUE DOG, active guidance jammer, and either MAD MOTH, deceptive jammer, or BIG BLAST, noise jammer.
2. As the BLUE DOG, and possible BIG BLAST, systems are no longer available in inventory, initial configuration of the A-12 would consist of PIN PEG and System 13C Mod D, which is a modified and improved MAD MOTH. Later configurations might include the EW systems available for the SR-71.
3. As BLUE DOG would no longer be used by the A-12, there would be sufficient space and weight capability to install System 17 L/W.